

REMARKS

Request for Personal Interview

Applicant respectfully requests an in-person interview to discuss the present claims in view of the cited art and formal questions. Should the Examiner pick up this case prior to the scheduling of such an interview, the Examiner is respectfully requested to contact the undersigned at 503-495-4575 to arrange a mutually convenient interview time.

Claim Status

Claims 25, 26, 29 and 32-51 remain pending in the present application. Claims 25 and 26 have been amended in an editorial manner and without prejudice. Claim 30 has been canceled per the Examiner's suggestion.

Formal Rejections

Claims Rejected Under 35 U.S.C. § 112, First Paragraph

Claim 25

The §112 rejection with respect to claim 25's recitation of "combined data" is respectfully traversed. The Office is invited to further consider, e.g., Fig. 10A along with original claim 25, line 6 "(b) compressing the combined data."

Moreover, with respect to the Office's discussion of the specification at page 9, applicant suggests that reading embedded auxiliary data does not necessarily require removal of auxiliary data from an embedded signal. For example, on page 10, lines 10-15, a data retrieving process would "measure" a difference between peak levels to retrieve the auxiliary data. Thus, not all implementations remove embedded data from a signal to read the embedded data.

Applicant submits that one of ordinary skill in the art would be enabled to make or use the invention as recited in claim 25 in view of our detailed specification.

Claim 36

A similar position applies to claim 36. The features of claim 36 find ample support in the specification, e.g., for a data signal including the auxiliary information embedded therein during a compressing step. Accordingly, applicant traverses the §112 rejection with respect to claim 36.

Claim 29

Applicant notes that claim 29 was also rejected under 35 U.S.C. § 112 (see the office action on page 5, paragraph 6, line 1). However, the office action did not specifically address claim 29. Applicant has reviewed claim 29 and believes it to be in acceptable form. Withdrawal of the rejection is respectfully requested.

Claims Rejected Under 35 U.S.C. § 112, Second Paragraph

Claim 26

Applicant appreciates the Examiner's suggestion. Claim 26 has been amended as suggested. Withdrawal of the rejection is respectfully requested.

Claim 25

Applicant respectfully traverses the outstanding rejections.

(Regarding the initial rejection (data vs. combined data), the Office will note that Applicant has amended the preamble of claim 25 in an editorial and non-prejudicial manner to include the term "embedded" to modify "data.")

The Office also objected to the phrase "wherein combined data comprises the non-compressed form." The phrase "the non-compressed form" finds antecedent basis where it describes the embedded data, and should not be limited to the office's suggested interpretation.

Withdrawal of the rejections is respectfully requested.

Art Based Rejections

Applicant respectfully traverses the rejection of the pending claims as being unpatentable over Hartung variously in view of Nakano (U.S. Patent No. 6,298,142) and variously unpatentable over Cooklev (U.S. Patent No. 6,359,998), as set forth in the Office Action.

Applicant respectfully requests that the claims be revisited under a new claim interpretation in view of the above formal comments.

Hartung and Nakano

Claim 25

Claim 25 relates to a method of embedding auxiliary information in data in which the auxiliary information is not lost with compression of the embedded data. The embedded data initially includes a non-compressed form including the auxiliary information embedded therein. The non-compressed form plus the auxiliary information can be referred to as combined data. The method includes the steps of: retrieving the auxiliary information from the combined data; *compressing the combined data*; and *embedding* the auxiliary information in the compressed combined data. The compressed combined data includes the auxiliary information embedded therein.

Hartung does not teach or suggest such an inventive combination. While Hartung may suggest different techniques for watermarking raw video and compressed video, Hartung is not understood to contemplate embedding auxiliary information in data so that the auxiliary information is not lost with compression of the data in the manner contemplated by claim 25.

Hartung does not envision such a combination of features, nor does Nakano remedy Hartung's deficiencies.

Accordingly, claim 25 should be allowed.

Claim 33

Claim 33 recites a distinct combination of features. Analyzing claim 33 as if it recited the exact same features as claim 25 is considered improper, since it ignores the actual combination of features recited in claim 33.

Moreover, claim 33 recites a combination of features that is not taught or suggested by Hartung and Nakano.

Claim 33 recites a method including retrieving auxiliary information from a data signal. The auxiliary information is encoded in the data signal. The auxiliary information is retrieved from the data signal while the data signal includes a non-compressed form; compressing the data signal, and the retrieved auxiliary information is embedded in the compressed data signal. The compressed data signal comprises the retrieved auxiliary information

Hartung discusses techniques for watermarking raw video and compressed video, but *Hartung does not contemplate the inter-relationship of the data in claim 33, e.g., where auxiliary information is retrieved from a data signal, the data signal is then compressed, and then the retrieved auxiliary information is embedded into the compressed data signal.*

Nakano is deficient with regard to the features (as well as the inter-relationship of the features) disclosed in claim 33.

Thus, claim 33 should be allowed.

Claim 40

Hartung and Nakano also fail to teach or suggest the features recited in claim 40. For example, the proposed combination of references fail to disclose retrieving auxiliary information from an original data signal, wherein the auxiliary information is encoded in

the original data signal; *performing a transformation on the original data* signal to create a transformed data signal; and embedding *the retrieved auxiliary information in the transformed data signal*, wherein the transformed data comprises the retrieved auxiliary information.

Claim 40 should be similarly allowed.

Claim 26

Claim 26 stands rejected as being unpatentable over Cooklev. Applicant respectfully traverses this rejection.

With great respect, Applicant is unsure why Cooklev is cited against the present claims. For example, the cited passages (e.g., Col. 12, lines 16-22 and 57-59, and Col. 13, lines 39-42) are understood to deal with a verification process.

Claim 26 recites a method of embedding auxiliary information in data, wherein the auxiliary information is not lost with decompression of the data from a compressed form to a non-compressed form, and wherein the compressed form includes the auxiliary information. The method includes a unique combination of: i) retrieving the auxiliary information from the compressed form of the data; ii) decompressing the compressed form to yield the non-compressed form; and iii) steganographically embedding the auxiliary information in the non-compressed form whereby the non-compressed form of the data comprises the auxiliary information embedded therein.

Cooklev is thus not understood to teach or suggest the combination and interrelationship of the claimed features.

Hence, claim 26 should be allowed.

Claim 37

Claim 37 recites a distinct combination of features. Analyzing claim 37 as if it recited the exact same features as claim 26 is considered improper, since it ignores the actual combination of features recited in claim 37.

Individual consideration of claim 37 is respectfully requested.

Dependent Claims

The dependent claims recite many additional patentable features when taken in combination with their respective base claims.

Favorable and independent consideration is requested for each of the dependent claims.

Claim 51

Claim 51 recites a distinct combination of features. Analyzing claim 51 as if it recited the exact same features as claim 26 is considered improper, since it ignores the actual combination of features recited in claim 51. (The Examiner's notation that Cooklev teaches that non-compressed data including auxiliary information comprises digital data falls short of addressing the combination as recited by claim 51.).

Favorable consideration is requested.

Information Disclosure Statement

An Information Disclosure Statement and Form 1449 are filed concurrently herewith. Consideration of the documents listed on the 1449 is respectfully requested.

Conclusion

Early passage to issuance is respectfully requested in view of the above amendments and remarks. (Other deficiencies of the cited art need not be belabored herein.).

We look forward to our upcoming interview.

Date: January 22, 2004

Respectfully submitted,

Customer No. 23735

DIGIMARC CORPORATION

Phone: 503-885-9699

FAX: 503-885-9880

By 

Steven W. Stewart
Registration No. 45,133